

Overview Information	
Funding Announcement Title	Limited Competition: <i>All of Us</i> Research Program Regional Medical Center Healthcare Provider Organizations (OT2)
Funding Announcement Number	OT-PM-18-001
Participating Organization	National Institutes of Health (NIH)
Components of Participating Organizations	This funding announcement is part of the NIH Precision Medicine Initiative®. The funding announcement will be administered by the National Center for Advancing Translational Sciences (NCATS) on behalf of the NIH.
Announcement Type	New
Related Notices	<p>RFA-PM-16-002 Precision Medicine Initiative® Cohort Program Healthcare Provider Organization Enrollment Centers (UG3/UH3)</p> <p>OT-PM-16-003 Precision Medicine Initiative Cohort Program Regional Medical Center Healthcare Provider Organizations (OT2)</p> <p>OT-PM-17-002 All of Us Research Program Engagement Partners (OT2)</p> <p>NOT-PM-18-001 - Notice of Limited Competition for Continuation of Regional Medical Center Healthcare Provider Organizations Released</p>
Funding Announcement Purpose	<p>The purpose of this funding announcement (FA) is to solicit applications for continuation of regional medical center healthcare provider organizations (RMC HPOs) as partners with the <i>All of Us</i> Research Program. This FA supersedes all previous RFAs and FAs for HPOs in the program so that all RMC HPO enrollment centers are funded under the same mechanism. Therefore, awardees under previous RMC HPO RFAs or FAs should apply to this FA to continue within the program.</p> <p>The goal of the <i>All of Us</i> Research Program is to build a research program of one million or more U.S. volunteers who are engaged as partners in a longitudinal, long-term effort to transform the understanding of factors contributing to individual health and disease.</p> <p>Applicants awarded under this FA will be responsible for continued engagement, enrollment and retention of diverse individuals within their network and catchment areas at the targeted enrollment expectations outlined in this FA. RMC HPOs will also be responsible for actively collaborating in the governance and scientific oversight of the <i>All of Us</i> Research Program, through participation in working groups, committees, task forces, and other consortium activities.</p>
Funding Instrument	The funding instrument is the Other Transaction (OT) award mechanism: An OT award is not a grant, cooperative agreement or contract, and uses Other Transaction Authorities.

Funds Available	Actual amounts will depend on funds available, but should not exceed \$12M in total costs per year for each year of the OT2 award application.
Anticipated Number of Awards	NIH intends to fund ten (10) awards in FY2018.
Key Dates	
Award Project Period	The total project period will be five (5) years.
Post Date	October 4, 2017
Application Due Date	November 17, 2017 (5:00 pm local time)
Scientific/Technical Review Date	Review will be conducted immediately upon receipt of applications.
Award Timeline	Award will be made upon selection and award negotiation. Earliest anticipated start date is January 15, 2018.
Application Instructions	
Required Application Content	<p>Applications must include sufficient detail to allow the NIH to assess the applicant's capabilities to successfully complete the award activities. All applicants must address and integrate all task areas. Eligible organizations may only submit one application.</p> <p>Applications must include the following with the total application package not exceeding 25 pages:</p> <ul style="list-style-type: none"> • Technical Approach: Not to exceed 6 pages. The technical approach should be based on the overall plans and activities identified in this funding announcement. • Outreach and Engagement Approach(es) and enrollment targets: Not to exceed 12 pages, including tables. The outreach and engagement approach should include distinct plans for engagement for enrollment and retention of a diverse population. The estimated enrollment targets should be in the form of tables. This approach must also include a description of the over-sampling strategy to achieve full enrollments of the desired diversity targets. • PD/PI Experience and Key Personnel (Applicants should provide brief bios of key personnel): Not to exceed 2 page. The level of effort these individuals anticipate committing to this project, if awarded, must be identified. Expected levels of Effort (LoE) are given in parenthesis below. Each application must identify the Program Director/Principal Investigator (PD/PI LoE 30%) or multiple PDs/Pis (LoE 20% each), an IT/EHR Lead (LoE 10%), a Communications lead (LoE 5%) and a Participant Engagement Lead (LoE 20%). A list of other partners, site PI's and other key leads in the application should be included as well. An overall leadership structure and management plan must be included in this section. If there are

	<p>multiple PDs/PIs, a leadership plan that incorporates a conflict resolution plan must be included.</p> <ul style="list-style-type: none"> • Past Performance (Corporate/Organizational experience related to the funding announcement): Not to exceed 1 page. Applicants should describe or refer to the track record of performing the specialized work required in this project. • Cost Proposal: Not to exceed 4 pages. Applicants must provide a milestone driven, cost allocated plan. Cost models can be cost-sharing, fixed price, adjustable (cost reimbursable) or a hybrid approach. <p>A one-page cover letter is not included in the 25 page limit, and is allowed. Only the following appendices are allowed, if applicable:</p> <ol style="list-style-type: none"> 1) Letters of support, 2) Information extracted from prior NIH document submissions that describe the five content sections as referenced above, and 3) Plans for, or confirmation of any of the following: <ul style="list-style-type: none"> • An executed Interconnection Security Agreement, • An executed IRB Reliance Agreement, • A submitted or approved Institutional-Specific IRB Application, and/or • A description of state laws that may impact the applicant’s clinical research, EHR data collection, and/or genomic data collection. <p>Other appendices are not allowed.</p>
<p>Instructions for Application Submission</p>	<p>Applications must be submitted in a single email attachment in PDF (Adobe) format to Ms. Irene Haas, <i>All of Us</i> Research Program Agreements Officer, at PMICPFOAInquiries@mail.nih.gov. Applications must be submitted by an authorized representative from your organization. Paper applications will not be accepted.</p>
<p>Eligibility Information</p>	
<p>Eligible Applicants</p>	<p>Organizations, currently receiving funding support through the <i>All of Us</i> Research Program as a prime HPO awardee are eligible to apply.</p> <p>Applicant organizations may seek partnerships with all types of domestic organizations, with the following eligibility:</p> <p>Higher Education Institutions</p> <ul style="list-style-type: none"> • Public/State Controlled Institutions of Higher Education • Private Institutions of Higher Education <p>The following types of Higher Education as Public or Private Institutions of Higher Education:</p> <ul style="list-style-type: none"> o Hispanic-serving Institutions o Historically Black Colleges and Universities (HBCUs) o Tribally Controlled Colleges and Universities (TCCUs) o Alaska Native and Native Hawaiian Serving Institutions

	<p>o Asian American Native American Pacific Islander Serving Institutions (AANAPISIs)</p> <p>Nonprofits Other Than Institutions of Higher Education</p> <ul style="list-style-type: none"> • Nonprofits with 501(c)(3) IRS Status (Other than Institutions of Higher Education) • Nonprofits without 501(c)(3) IRS Status (Other than Institutions of Higher Education) <p>For-Profit Organizations</p> <ul style="list-style-type: none"> • Small Businesses • For-Profit Organizations (Other than Small Businesses) <p>Applicant organizations and enrollment partners must be HIPAA covered entities and are required to use the <i>All of Us</i> Research Program central single Institutional Review Board (IRB). An IRB reliance agreement will be required for applicants and enrollment sites being considered for funding.</p>
<p>Foreign Institutions</p>	<p>Non-domestic (non-U.S.) Entities (Foreign Institutions) are not eligible to apply.</p> <p>Non-domestic (non-U.S.) components of U.S. Organizations are not eligible to apply.</p> <p>Foreign components are not allowed. Foreign components are defined as performance of any significant element or segment of the project outside of the United States either by the award recipient or by an individual employed by a foreign organization whether or not OT2 award funds are expended.</p>
<p>Application Review</p>	
<p>Objective Review Process</p>	<p>Applications will be evaluated for scientific and technical merit by an appropriate review group convened by the NIH.</p> <p>Reviewers will evaluate applications based on the following:</p> <ul style="list-style-type: none"> • Technical Approach • Engagement Approach • PD/PI and Key Personnel Experience • Past Performance • Cost Proposal <p>Applicants may receive a brief written summary of the review. Successful applicants will undergo a negotiation process for award determination.</p>
<p>Evaluation Process</p>	<p>In addition to technical and scientific merit, applications will be evaluated for programmatic priority.</p> <p>Programmatic priority will be given to applicants:</p> <ul style="list-style-type: none"> • Describing plans around the engagement of geographic regions or populations that are currently underrepresented in biomedical research, including a description of any

	<p>community/participant advisory boards within the program’s structure</p> <ul style="list-style-type: none"> • Engaging, enrolling, and retaining a diverse cohort reflecting the diversity of the U.S. population within the proposed catchment area • Maintaining highly integrated and networked electronic health record systems with the ability to efficiently and effectively provide structured EHR data to secured, cloud-based environments • Documenting proven leadership and strong collaborative teams, and willingness to work with new partners in a large national program • Indicating active technical, clinical, scientific, administrative and staffing capabilities to engage, enroll, and retain the participants in the <i>All of Us</i> Research Program with the scope and scale needed, noting where and how over-enrollment and/or under-enrollment strategies will be applied • Describing their ability to enroll and retain 20,000 full participants for each of the first of 3 years, followed by tapering down to 18,000 and 15,000 per year, respectively, by the end of the award period and all activities required therein. Retention efforts should ramp up over each year of the award, with intensive retention efforts in the last two years.
Questions Regarding this Funding announcement and Agreements Officer Contact	Questions may be submitted via email to Ms. Irene Haas, <i>All of Us</i> Research Program Agreements Officer, National Center for Advancing Translational Sciences (NCATS) at PMICPFOAInquiries@mail.nih.gov .
Authority	Other Transaction awards will be made pursuant to current authorizing legislation.
All of Us Research Program Other Transaction (OT) Policy Guide	Other Transaction awards are subject to the requirements of the <i>Other Transaction Award Policy Guide for the NIH Precision Medicine Initiative</i> . Applicants must review this policy guide, which is available by accessing: http://www.nih.gov/sites/default/files/research-training/initiatives/pmi/20151118-ot-award-policy-guide.pdf

All of Us Research Program Regional Medical Center Healthcare Provider Organizations

Background

All of Us Research Program, formerly the Precision Medicine Initiative (PMI) Cohort Program, is a participant-engaged, data-driven enterprise supporting research at the intersection of lifestyle, environment, and genetics to produce new knowledge with the goal of developing more effective ways to prolong health and treat disease. It is in part codified through the 21st Century Cures Act, which, among other things, mandates that the program enroll participants from diverse backgrounds, from all age groups and health statuses. Information from the program will be a broad, powerful resource for researchers working on a variety of important health questions and is intended to be a national resource that will, over time, benefit the entire U.S. population.

The *All of Us* Research Program will maximize its research value, among others, by including:

- a sufficiently large number of diverse participants to achieve adequate power for evaluation of common disorders from infancy to old age;
- intentional and directed over-sampling of populations historically underrepresented in biomedical research (UBR) to have sufficient power for statistical analyses in order to help understand the specific health conditions and disparities affecting these population groups;
- a broad range of genetic backgrounds, dietary, lifestyle, and environmental exposure assessments;
- a broad array of clinical and laboratory information via electronic health data, not limited to any single disease;
- a study design, recruitment and implementation process that ensures a high follow-up rate and comparable follow up rates across diverse population groups.

Since July 2016, the NIH has issued [awards](#) for the *All of Us* Research Program to build the foundational partnerships and infrastructure needed to launch the program. Enrollment of participants will be through two distinct approaches: one leveraging the strengths of the HPOs existing relationships with potential participants, and the other opening enrollment directly to participants who are not part of an HPO (called Direct Volunteers or DVs). There are currently three types of HPOs within the *All of Us* Research Program. The first type is the regional medical center (RMC) HPO; the second type is community health center HPO, such as Federally Qualified Health Centers (FQHCs); and the third type is the Veterans Administration Medical Center (VAMC) HPO. The focus of this FA is solely on the RMC HPO approach.

Purpose and Objectives of the *All of Us* Research Program Regional Medical Center Health Care Provider Organizations

Through this limited competition FA, the NIH solicits proposals from RMC HPOs to continue supporting the *All of Us* Research Program consortium. Applicants have already provided an added benefit to the existing consortium through the geographic regions they serve, the diversity of their patient population, their engagement approaches and long-standing relationships of trust with their patients, their substantial EHR data experience, their enthusiasm, and other key experience and expertise that allows for immediate consortium contributions. This FA represents the lessons learned from the past year to take the next steps towards achieving an unprecedented national resource for precision medicine research.

The objectives for this FA are to focus on areas that require additional emphasis to ensure the goals of the program can be achieved. Although all areas should be addressed, general guidance for the proposal are:

1. Areas where detailed emphasis are strongly encouraged:
 - Outreach and engagement plans
 - Enrollment plans, including detailed tables and overall goals of per day or per week enrollment targets at scale
 - Relevant state law analyses for HIPAA, health records, and genomic data
 - Budget
2. Areas where less emphasis is needed (Applicant should provide sufficient detail to convey key points, show understanding of what is being requested, show compliance or expertise, and/or refer to an appendix containing relevant information)
 - Catchment Area

- IT/EHR plans
- Physical measurement and biospecimen plans
- Where documentation related to the key elements is already obtained.

Inherent in attaining a diverse cohort of 1 million or more participants is providing outreach and engagement to an even larger number of people for the scope and scale required. Recognizing that there will be many participants who may choose to participate in only part of the program activities, it is important to define a participant who is considered fully enrolled, referred to as a “full participant” so that plans can be established and described to show a number needed to reach to obtain the full participant enrollment targets. It is important to understand the degree to which oversampling (or undersampling) will be needed to achieve the diversity of full participants, since some groups may require deeper engagement strategies than others. A full participant is currently defined as fully enrolled in the *All of Us* Research Program when they have:

- 1) provided a general informed consent, which includes an agreement to be recontacted;
- 2) provided an electronic health record authorization and consent, and a genetics consent (when ready);
- 3) completed a series of brief survey modules; and
- 4) undergone physical measurements and biospecimen collections, including blood and urine.

Participants will only be asked to provide a biospecimen and undergo physical measurements if they have authorized their EHR and genetic data (when ready) to be shared with the program. However, participants that choose not to authorize access to their EHR can still complete surveys and may have the opportunity to participate in other research endeavors related to the program over time. Data and biosamples from the full participants will make up the core dataset of a 1 million or more cohort, and will be stored in a secure computing environment and a biobank, respectively, under rigorous standards to protect individual privacy.

For the initial period of award, only participants who are 18 years or older will be eligible; children and other populations that require additional IRB, ethical and legal considerations will be included in the future. The program will utilize a variety of data collection methods over the life of the program, including mobile technologies, additional research questionnaires, collection of baseline and longitudinal data from EHRs, collection and analyses of other biospecimens including genomic analyses, and other data types to be determined.

Other Transaction RMC HPO

The Other Transaction award mechanism allows significant ongoing involvement from NIH staff and provides the NIH the flexibility to alter the course of the project in real-time to better meet the overarching scientific goals and explore with awardees additional innovative ways to improve the resource. This may mean that awarded activity could be expanded, modified, and partnered – or in some cases, not supported or discontinued--based on program needs, emerging methods or approaches, and availability of funds. Performance during the award period will be reviewed on a frequent and ongoing basis and course corrections will be made as necessary.

Key Events	Dates	Action needed by applicants
Funding Announcement Posted	October 4, 2017	
Applications Due	November 17, 2017	Email completed application by 5pm local time. Late applications will not be accepted.
Review of applications completed	December 11-15, 2017	

SAM and DUNS number submitted	December 15, 2017	Candidates e-mail their DUNS number and SAM account information to PMICPFOAInquiries@mail.nih.gov
Estimated Earliest Award Date	January 15, 2018	

All of Us Research Program Organization and Governance Structure

The *All of Us* Research Program will function as a Consortium, with all awardees considered to be members of the Consortium with specific roles in its governance structure. For example, the *All of Us* Research Program Steering Committee will consist of the contact Program Directors/Principal Investigators (PDs/PIs) from each of the awards. The Steering Committee will meet up to three times per year in person to share information on planning, recruitment progress, successful engagement and retention approaches, data and biospecimen collection, preliminary results, scientific direction, and analyses in progress. The *All of Us* Research Program Consortium will include participant representatives in all aspects of its governance structure. Committees, task forces, and boards will be established by the *All of Us* Research Program Consortium Steering Committee to oversee the development and implementation of Consortium activities.

The *All of Us* Research Program will have a single Institutional Review Board (IRB), to the extent permitted by law, constituted to ensure prompt and thoughtful consideration of the evolving protocols in the *All of Us* Research Program and the central importance of participants as research partners. The single IRB will include representatives of the participant community. Each awardee and any sub-awardees and enrollment partners will be required to establish an IRB reliance agreement as well as to submit an Institutional Site-specific IRB Application (ISIA) prior to award and on an annual basis from date of approval.

Overview of Key Elements to Include in the Application

Applicants should describe how they will conduct the activities and collaborate across the Consortium as needed for each of the key elements listed below.

The applicant must propose a well-defined set of milestones for each element and define the evaluative metrics for measuring them. Milestones should include quantitative monthly enrollment metrics over the first-year period. In event of an award, the NIH staff will evaluate and negotiate a list of milestones for each interval of support as part of the ongoing involvement and ensuring the goals of this FA are met.

Key Elements

In general, the key activities for the RMC HPO are described broadly as follows. Applicants must describe how each of these goals and components will be achieved successfully.

1. Catchment Area

Applicants should describe the catchment area, its diversity, and how the overall enrollment approach complements the *All of Us* Research Program by:

- a) Helping the *All of Us* Research Program meet the goals to broadly reflect the diversity of the United States and to enroll and retain sufficient numbers of healthy people and people with existing disease from diverse populations (including key demographics that are underrepresented in biomedical research: race and ethnicity, sex, age, gender identity, sexual

orientation, income, education, access to care, and disabilities, and geographic diversity) to address scientific questions.

- b) Expanding catchment of applicant institution by collaborating with institutions and organizations, such as community health centers, Federally Qualified Health Centers, and academic or networked providers, to the extent applicable.

2. Participant Engagement Plan and Enrollment Approach

Applicants should describe their participant engagement plan, which should reflect the following principles:

- a) An inclusive philosophy of engagement and cultural sensitivity that enables participation by individuals who have widely varying socioeconomic status, age, geography, health literacy, racial identity, ethnic heritage, personal competence with information technologies (including mobile technologies), and includes both healthy individuals and those with a wide range of health and disease conditions.
- b) A philosophy about individual data access that includes immediate feedback to participants on the data they have submitted as well as archival access to scientific data related to them as an individual that is maintained by the program.
- c) An expectation that cohort participants may be partners in the governance and design process, and may serve as testers of the technologies and methods.
- d) Creating awareness in the applicant organization(s), including the providers, about the goals of the program.

The *All of Us* Research Program engagement strategy requires multidirectional communication and participation in the program by individuals -- those participating, their advocates, and interested community members -- and organizations. In order to achieve maximal effectiveness, it is our expectation that consortium partners thread engagement strategies through awareness, recruitment, enrollment, and retention activities. Required elements include, but are not limited to the following:

- Principal Investigators leading by example, making sure that all staff understand the program's core values (page 16, section 2.1 of the core protocol: <https://allofus.nih.gov/news-events-and-media/announcements/all-us-research-program-initial-protocol>)
- Budget allocations that include appropriate financial and staffing resources necessary to achieve impactful and inclusive engagement and retention strategies for diverse participants at all stages of the program, recognizing that different participants may require varying levels of engagement
- In addition to the engagement lead, designation of 1-2 key personnel who are trained to have the knowledge, cultural competence, respect, sensitivity to and accountability for the successful implementation of the applicant's engagement efforts, including the plans to conduct outreach and engagement for the number of diverse communities to achieve the per day or per week enrollment targets needs
- Formation of an active and engaged Community/Participant Advisory Board (CAB/PAB) or equivalent consisting of key individuals who are attuned to and responsive to the needs of the communities being recruited to participate in the *All of Us* Research Program. The following information is also requested:
 - Size and demographic composition of the CAB/PAB to ensure that the CAB/PAB is diverse and reflective of the underrepresented populations within the respective catchment area;
 - Demographic information of CAB/PAB members
 - Expected frequency of meetings; and

- Specific examples of how input from the CAB/PAB and other key stakeholders will be incorporated into and utilized to impact *All of Us* Research Program recruitment, enrollment, and retention strategies and study plans.
- Inclusion of participant partners as key voices, such as through participant-facing committees, task forces and work groups, or through other mechanisms to obtain feedback from participants about their experiences (e.g. suggestion boxes, etc).

The Participant Engagement Lead will be responsible for working across a broader network of the NIH-led engagement leads across the consortium overseeing all aspects of the proposed plan, and should have experience working with community partners and patient advocacy groups. This plan must also identify, implement, and evaluate all engagement activities and their impact on participant enrollment and retention, as well as plans for remediation to ensure enrollment and retention stay the course for the duration of the award period.

3. Physical Measurements and Biospecimen Collections

This activity has two main components: a) physical measurements and b) biospecimen collection that are paired together due to the expectation that they will be conducted during a single visit.

Applicants should note that the current protocol for physical measurements and biospecimen collection developed by the *All of Us* Research Program can be found [here](#). It is expected that awardees have the necessary equipment, space, staff, and experience to conduct the required protocol elements at scale.

a) Component 1 - Physical measurements.

Applicants should describe readiness for or experience with using HealthPro for collecting and digitally transmitting the physical measurements data to the Data and Research Center (DRC). An interconnection security agreement (ISA) executed with the Vanderbilt University Medical Center is required for these activities and for operating in the FISMA moderate environment. If this has already been executed at time of submission, applicant may append the agreement. If it has not been executed, a plan and timeline for submission should be included in the submission.

b) Component 2 – Biospecimen Collections. The RMC HPO must have established all processes for implementing the current protocol for the collection, initial processing, and transfer of biospecimens to the Biobank. The Biobank will also be responsible for further processing, aliquoting, storing, and distributing the samples that are received.

RMC HPOs are expected to collect biospecimens from participants who consented to the primary study, sharing their EHR and genomic data, and completed three PPI modules (note that genomics consent will be added soon and will also be required for biospecimen collections). The RMC HPOs are required to perform minimal processing, including centrifugation when appropriate, prior to shipping the samples on the day of collection. This will enable the Biobank to process, aliquot, and store specimens within 40 hours of collection.

The RMC HPO should include the budget for and describe the clinical rooms, space, and personnel to conduct the physical measurements, as well as the needed supplies for biospecimen collections to achieve the steady pace of enrolling approximately 70 full participants per day or approximately 420 per week.

In addition to these components, applicants should diagram or outline a process for scheduling physical measurements and biospecimen collection visits with the participants for the *All of Us* Research Program until such time a national scheduling management system is put in place.

Although not allowed at this time, applicants should note their ability and/or willingness to perform these functions with direct volunteers who are not members of the HPO as a way to help increase diversity enrollments. (See also Key Element 5).

4. EHR Data

The IT/EHR Lead will be responsible for all aspects of the applicant's plan for providing robust and comprehensive EHR data on their consented participants. They should have experience in curating EHR data and implementing the [OMOPv5](#) common data model. This plan must include how the RMC HPO will curate, format, and transfer data to the DRC, or simply describing the experience and results from a data sprint. An outline is sufficient, but a flow diagram is preferred.

5. The Accrual Plan: Enrollments within Each Year and Over the Proposed Five-Year Award Period

RMC HPOs will be expected to enroll participants and foster participant retention, data collection, and continued engagement in the *All of Us* Research Program. Current expectations for the annual full participant accruals are the following:

Year 1: 20,000*

Year 2: 20,000

Year 3: 20,000

Year 4: 18,000

Year 5: 15,000

In general, these yearly accrual targets reflect approximately 70 full participants per day for 288 days (48 six-day weeks) of active enrollments (of the 364-day year/52 week year), ramping down in the last two years to an average of 63 and 52 full participants per day, respectively. Applicants should describe their plans for staffing to and achieving the full participant numbers per day necessary to sustain a steady pace of enrollments to achieve the enrollment goals. Although these are the expected targets, the goals of the program are to engage a diverse cohort. Some allowances will be considered if applicants do not achieve the targets for any given accrual period. It is worth emphasizing that enrolling a diverse and highly engaged cohort is of paramount importance. To this end, targets that fall below the expectations listed above are allowable, providing they do not fall below 75%. A term and condition for applying metrics to the progress of enrollments will be applied to the award.

*Note that the applicants who have started enrolling participants from a previous award will be expected to demonstrate a steady pace of approximately 70 full participant enrollments per day (or approximately 420 per week), and/or have at least 4 months of experience enrolling full participants at a course and speed of ramping up towards ~70 full participants per day within a proposed timeline. Once either is achieved with a less than 1% error rate based upon reconciliation reporting from the biobank, the enrollments accrued will be applied to the 20,000 expected totals in year one of this FA.

Applicants should provide up to three tables along with a narrative to describe the longitudinal (10 or more years) cohort design principles for achieving the diverse enrollment targets stipulated in this FA, including the approaches for oversampling and/or undersampling that may be required to achieve maximal diversity of the catchment population.

- Table 1 should describe the first year at monthly intervals of expected full participant enrollments by each enrollment site (including sub-awards), by race/ethnicity and sex, and for as many of the following characteristics that may be estimated: age, sexual orientation and

gender identity, disability status, access to care, income, educational attainment, and geographic factors (states represented as well as population density).

- Table 2 should describe enrollment expectations for years 2 through 5, providing yearly estimates of full participant enrollments using the same categories as in Table 1.
- Table 3 (optional) should be included if the applicant is interested in enrolling direct volunteers (DVs). Although not technically feasible at this time, this is a capability that is expected in the early stages of the award. Table 3 should provide expected number and percentage of DV enrollments, that may be anticipated over the award period. A narrative justifying the rationale of enrolling DVs is required, including the option of leveraging the DV strategy of requesting and obtaining EHRs from those participants. A budget allocation commensurate with the expected activity should be included in the budget section.

Applicants considered for award will be required to submit the NIH Inclusion Enrollment Form at a later date. This Form is a separate and additional submission based on the above three tables, as applicable.

Retention efforts are expected to be steady in the first 3 years, with increasing effort in the last two years. Where available, applicants should discuss any type of statistical models or metrics for assessing retention efforts by demographic. For example, what are the expected attrition rates by demographic, and how will attrition be evaluated and addressed?

- a) Describe how you propose to ensure high retention rates, including the following:
 - Describe the value the program can bring to the participants within the HPO, such as plans for working with the *All of Us* Research Program Consortium to enable returning information to participants.
 - Establish reporting metrics for each step in the enrollment process, from inquiry as a potential participant to a full cohort member, and how these may differ within your enrollment catchment area(s) and across indices of diversity.
 - Describe how overall enrollment data will be gathered and monitored/evaluated, including for specific populations and subgroups, such as those who are difficult to reach, or are underserved.
 - Describe expectations for baseline attrition rates for different demographics, and how this will be addressed.
- b) Provide a plan for how the RMC HPO will work with the Data and Research Support Center to ensure data integrity and participant continuity at the end of the period of support if the OT award is not able to continue, or if RMC enrollees wish to become Direct Volunteers.
- c) For planning and feasibility purposes, applicants should briefly describe their anticipated ability to scale to enroll children, incarcerated persons, or other special populations that require additional IRB, ethical or legal considerations.
- d) Applicants must identify a policy and/or regulatory expert within their institutions, subawards, or third parties, who will be able to consult on issues related to consent, genomics, state law, and other policy related items.

Administrative and Programmatic Reviews during the Award Period: Overall Timeline and Milestones

Applicants are at liberty to construct a set of milestones and timelines that they believe are fitted to their capabilities and workflow, and have a high likelihood of being able to deliver a fully operational

RMC with the ability to enroll the diverse enrollment targets outlined in the FA. The dominant role and prime responsibility for decisions regarding task implementation and activities will be shared, with NIH having the final decision authority.

A timeline (Gantt chart) including milestones is required. Milestones are goals that must include clear and quantitative objective evaluation metrics. Milestones should be provided in monthly intervals and include quantitative monthly enrollment metrics over the first year of the 5-year award. These milestones and metrics are required to provide clear indicators of the project's continued progress or emergent difficulties and will be used to evaluate award progress on an ongoing basis. Note that the reporting frequency will be monthly at first, and may be adjusted based on programmatic need.

Awards will include a term and condition of award that establishes an enrollment accrual plan to evaluate progress on the enrollment targets. Regular reports will be required for NIH to assess progress. NIH will specify the report submission dates, format and data elements in the terms of the award. NIH will accomplish these reviews as quickly as practicable to avoid unnecessary delays. Milestone progression will be used to determine if activities supported by the award should be continued, modified, and/or discontinued.

Budget

Funds requested for salary support for all personnel must be compliant with the NIH Salary Cap in effect at the time of award.

RMC HPOs should be sufficiently funded to provide increased levels of support to engage diverse communities. Budgets for enrollment should be broken down to describe the expected cost per full participant for each diversity category expected. The budget proposal should anticipate varying effort around outreach, engagement, and retention within the proposed participant population.

Applicants may request funding support for participant compensation, but should not exceed the compensation described in the current *All of Us* Research Program protocol (\$25 per participant). Funds requested for promotional items and memorabilia such as gifts, pens, etc. are not allowable with federally awarded funds.

Applicants' PI/PDs and key personnel should plan for several weekly calls and team meetings as needed over the course of the award. In addition, 3 members from each award should plan for and budget for three trips annually to Bethesda, MD for *All of Us* Research Program Steering Committee meetings.

Additional Requirements for Award

The NIH encourages the development and evaluation of innovative methods for intensive involvement by participants in the evolution of *All of Us* Research Program participant-facing resources, study design and execution.

Among other important aspects of participant engagement are privacy, trust, and security, applicants must be in compliance with the following *All of Us* Research Program Principles:

- Precision Medicine Initiative: [Data Security Policy Principles and Framework](#):
- Precision Medicine Initiative: [Privacy and Trust Principles](#)

Inventions and Patents

To promote the broad sharing of information and inventions in the *All of Us* Research Program, awardee

inventions will be governed by FAR clause 52.227-13, which provides title to the Government in any invention made under this award, subject to a revocable, nonexclusive, paid-up license in each patent application filed in any country on a subject invention and any resulting patent in which the government obtains title. This is to assure that patents directed to inventions made under this award cannot be used to block access by the research public to this important resource and associated technology.

Third-party agreements, including subawardees, subcontracts, and vendors.

- (1) The Awardee shall include the substance of this patent rights clause in all third-party agreements for experimental, developmental, or research work. This patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the third parties (subcontractor, subawardees, and vendors) have all rights and obligations of the Awardee in the clause. The Awardee shall not, as part of the consideration for awarding the third-party agreement, obtain rights in the third party's subject inventions.
- (2) In the event of a refusal by a prospective third party to accept the clause, the Awardee—
 - a. Shall promptly submit a written notice to the *All of Us* Research Program Agreements Officer setting forth the third party's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and
 - b. Shall not proceed with such third-party agreement without the written authorization of the *All of Us* Research Program Agreements Officers.
- (3) In third party agreements at any tier, the agency, the third party, and the Awardee agree that the mutual obligations of the parties created by the patent rights clause constitute a contract between the third party and the agency with respect to those matters covered by this clause.
- (4) The Awardee shall promptly notify the *All of Us* Research Program Agreements Officer in writing upon the award of any third party at any tier containing a patent rights clause by identifying the third party, the applicable patent rights clause, the work to be performed under the third-party agreements, and the dates of award and estimated completion. Upon request of the *All of Us* Research Program Agreements Officer, the Awardee shall furnish a copy of such third-party agreement, and, no more frequently than annually, a listing of the third party activities that have been awarded.

Ownership of Data, Software, and Other Products

NIH will own all rights in data, software and other products (collectively "Works") made or developed under this award, subject to a paid-up, nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the awardee. The parties further agree that these Works are "works made for hire" as defined by the Copyright Act.

Award recipients agree that no commercial IP (e.g., data, software or other products), whether owned by the awardee or a third party except those specifically referenced in the application, will be utilized without express prior permission of NIH.

Data Policies

All data, including EHR data, collected by HPOs and their subsidiaries as part of the *All of Us* Research Program are intended for use through the *All of Us* data resource. Though information may flow through multiple points between its origin (the HPO or HPO subsidiary) and destination (the DRC), interstitial access points should restrict their use of the data only to activities stipulated and characterized in the program protocol and Interconnection Security Agreement.

All activities between the prime awardee, any sub awardees, or other third parties will be required to conform to the *All of Us* Research Program approved protocols.

Material Transfer Agreement

All awardees and partnering organizations will be required to comply with the established material transfer agreement below.

Any and all Material delivered pursuant to the award is understood to be experimental in nature and may have hazardous properties. The recipients of funds under this award, and any sub-awardees, may not make any representations and extend no warranties of any kind, either expressed or implied, with regards to such Materials. Unless prohibited by law, neither the Recipients of funds under this award, nor any of their respective officers, directors, employees or agents shall be liable to the All of Us Research Program biobank, for any direct, indirect, or consequential loss or damages arising out of the transfer, use, storage, or disposal of any such Material.

Institutions who receive Data and/or Materials under these awards are required to use Data and/or Materials only as outlined in the All of Us Research Program protocols, in a manner that is consistent with applicable state and federal laws and regulations, including any informed consent requirements and the terms of the institution's NIH funding, if any. Failure to adhere with this criterion may result in enforcement activities, including termination of award.

Human Subjects Requirements

The institution and personnel involved in the conduct of the research are required to comply with 45 CFR Part 46 and establish a reliance agreement with the *All of Us* Research Program central IRB. The NIH will issue all awardees a Certificate of Confidentiality to protect against the compelled disclosure of personally identifiable information and to support and defend the authority of the Certificate against legal challenges, per this [Notice](#).

Awarded entities will be required to provide assurance that the RMC HPO institution and partners are HIPAA covered entities, and/or are in compliance with the privacy standards therein.

Termination/Expiration Requirement

A fundamental objective of this Other Transactions award announcement is to ensure that these valuable data and specimen resources remains available without interruption to the research public for many years to come, even in the event that awardees withdraw or are terminated or otherwise can no longer manage the resource, or when the associated scientific grants, discussed elsewhere in this FA, are expired. NIH will own the biospecimens and related data and may take exclusive custody and control of them at its reasonable discretion. For purposes of this solicitation, "exclusive custody and control" means that upon termination or expiration of this award, the departing awardee and its partners may not retain or disclose a copy of any data, and may not establish a repository of any biospecimens (or portions thereof), acquired or generated under the award.

If the NIH decides to terminate this award, the termination of the award will be considered a unilateral change and the recipient will not have the right to appeal. Although a decision is made to terminate an award, the recipient must continue to comply with the Record Retention and Access, and Final Reporting requirements, and may need to sign a non-disclosure agreement to complete the termination process.